

Appendix H

North Bend Gravel Operation Land Use Technical Report

NORTH BEND GRAVEL OPERATION

LAND USE

TECHNICAL REPORT

For

KING COUNTY

Prepared by
Huckell/Weinman Associates, Inc.

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1.0 INTRODUCTION

Cadman, Inc. is proposing to mine and process sand and gravel resources on two sites east of the City of North Bend. Operations at the sites would include mining, conveying and processing of sand and gravel. Processing would include the production of aggregate products, asphalt and concrete.

This report analyzes existing land uses on the sites and in the vicinity of the sites; existing land use designations and relevant plans and policies; relationship of the Proposal to relevant plans and policies; and, the relationship of the Proposal to land uses in the vicinity of the sites. The alternatives analyzed in this report include the following:

- Alternative 1 – No Action.
- Alternative 2 – Proposal; Lower and Upper Sites Mining-Exit 34 .
- Alternative 2A – Upper Site Mining and Limited Lower Site Mining-Exit 34
- Alternative 3 – Lower and Upper Sites Mining (Exits 34 and 38)
- Alternative 3A – Upper Site Mining and Limited Lower Site Mining-Exits 34 and 38
- Alternative 4 – Upper Site Mining-Exit 38

The methodology for this Land Use Report consists of the following: site reconnaissance to identify area land uses; review of King County Zoning Code and Comprehensive Plan maps to identify land use designations of the sites and lands in the vicinity of the sites; review of King County Assessors maps to identify lot pattern and density in the area; review of numerous federal, state, and local planning documents to identify plans and policies relevant to the Proposal; and analysis of the relationship between the Proposal (and alternatives) to area land uses and relevant plans and policies.

2.0 EXISTING CONDITIONS

2.1 PROJECT SITE

The Lower Site is at the base of Grouse Ridge, at approximately elevation 690, and contains a former gravel mining operation. The Upper Site is at the top of Grouse Ridge, at approximately elevation 1,600. Both sites are owned by the Weyerhaeuser Company and are used for forest production. Most of the forested area on the sites has been logged and is in various stages of new tree growth. There are no authorized recreational uses of the sites.

The 115-acre Lower Site is accessed via a private gravel roadway (Grouse Ridge Road), with Weyerhaeuser having easement rights from the eastern boundary of the Upper Site to I-90. Grouse Ridge Road meanders throughout the Lower Site. The 578-acre Upper Site is accessed from the west by the gravel Grouse Ridge Road and from the southeast by the paved SE Grouse Ridge Road. Grouse Ridge Road meanders throughout the Upper Site.

Permit information on file with King County for previous activities on the Lower Site indicate that gravel mining on the site was initiated in approximately 1946 and continued until approximately 1988. The Lower

Site was listed in the 1960 Inventory of Washington Minerals, published by the Division of Mines and Geology, Washington State Department of Conservation, as an active mining site at that time.

2.2 SITE VICINITY

2.2.1 General Character

The Snoqualmie Valley is a rural area characterized by river floodplains, upland plateaus and the foothills of the Cascade Mountains. The topography of the hillsides surrounding the valley floor allows only limited development potential and has helped shape the land-use pattern of the area. The river valley floor is relatively flat and has developed with the most intensive land uses such as those in North Bend and near freeway interchanges. I-90 is a major built feature in the area.

The general land-use pattern of the Upper Snoqualmie Valley consists of suburban-type uses within the Cities of Snoqualmie and North Bend, dispersed residential development surrounding the cities, resource lands including forestry and mining uses, and recreational uses in the foothills of the Cascade Mountains.

2.2.2 Specific Land Uses

Figure 1 provides an aerial view of the area within approximately 1 mile of the Lower and Upper Sites. Land uses within this area include auto/truck-oriented retail, commercial establishments, residential subdivisions, dispersed rural residential homes, small farms, two active mining operations, two state parks, designated hiking trails, and forest lands. Figure 2 provides the general ownership pattern in the area.

2.2.2.1 Lower Site

To the immediate west of the Lower Site (a portion of which is proposed to contain the mining/processing area) is an approximately 1,000-foot-wide strip of forest land. Beyond the forest land to the west, along 468th Avenue SE, is a concentration of auto-oriented retail uses (motel, restaurants, gas stations, and auto/truck repair businesses) commonly referred to as Seattle Truck Town East. Farther west, along North Bend Way, is forest land, commercial uses (motel and truck repair businesses) and several trailer parks. To the immediate northwest is partially cleared forest land, the SE 144th Street roadway, and businesses with associated outdoor storage and parking. Farther northwest, across 468th Avenue SE, is a forest products business, scattered residences, and the approximately 3-year-old Wood River subdivision, which contains roughly 110 homes on approximately 1-acre lots.

To the immediate north of the Lower Site is a dirt and gravel public roadway (SE 144th Street), and the Lu residence and associated grounds. Several homes are located north of SE 144th Street, and on 476th Ave. SE and 475th Ave. SE. Farther north is SE Middle Fork Road and SE Lake Dorothy Road, both of which generally parallel the Middle Fork Snoqualmie River. Uses along SE Middle Fork Road to the north include a King County Department of Public Works storage yard, forested areas, and several rural residential subdivisions with approximately 1-acre lots (including the 20-lot River Ridge subdivision). The 1999 Snoqualmie Valley School District Capital Facilities Plan identifies the undeveloped parcel at the northeast corner of 468th Avenue SE and SE Middle Fork Road as the site for a new Middle School. The District anticipates that the Middle School will be constructed in 2004.

To the immediate east is forest land with trees in various stages of growth. Farther east, along both SE Middle Fork Road and SE Lake Dorothy Road, are scattered homes, the Valley Camp (a camp operated by the Lutheran Church) and the Middle Fork Snoqualmie River Day Use Area operated by the DNR. The highest concentration of residences in the area to the east is along SE Middle Fork Road, near the intersection with SE Lake Dorothy Road, where approximately 10 to 15 homes are on lots ranging from approximately 1 to 5 acres.

To the immediate south is right-of-way for I-90. Farther south, across I-90, on SE 153rd Street is a rural residential subdivision with roughly 40 homes on approximately 1-acre lots. Beyond this residential subdivision is a primarily forested area with interspersed homes, small farms, and Twin Falls State Park.

2.2.2.2 Upper Site

To the immediate west of the Upper Site is an approximately 1,200-foot-wide forested area. Farther west, and approximately 750 feet lower than the Upper Site, is I-90. West of I-90 is an area with forest land and dispersed residences. The residential subdivision along SE 153rd Street is within this area.

To the immediate south is an approximately 1,400-foot-wide forest area that includes the Homestead Valley Mine and the South Fork Snoqualmie River. Farther south, and at an elevation approximately 650 feet lower than the Upper Site, is I-90. Across I-90 is a mostly forested area with scattered homes, small farms, and Olallie State Park.

The Washington State Patrol Fire Training Academy is located immediately east of the proposed upper mining area. Farther east is forest land.

To the immediate north is an approximately 2,000-foot-wide area of forest in various stages of growth. Farther north, at an elevation approximately 700 feet lower than the top of the Upper Site, are residential homes, small farms, and forest lands along SE Middle Fork Road and SE Lake Dorothy Road. The DNR's Middle Fork Snoqualmie River Use area starts at the terminus of the paved portion of SE Lake Dorothy Road; this facility provides approximately 9 miles of hiking trails to Mailbox Peak and Granite Lakes. The Middle Fork Snoqualmie River is located farther north.

2.3 EXISTING LAND USE DESIGNATIONS

2.3.1 Site

The King County Comprehensive Plan (1994) identifies the sites and immediately surrounding area as Forestry and within the Forest Production District. According to the Comprehensive Plan, "the primary land use within the Forest Production District should be commercial forestry. Other resource uses, such as mining and agriculture, should be permitted within the Forest Production District when managed to be compatible with forest management." In addition, the King County Comprehensive Plan Mineral Resources Map identifies both the Lower and Upper Sites as "Potential Surface Mineral Resource Sites."

The King County Zoning Code implements the King County Comprehensive Plan's policies and objectives. The proposed sites are zoned F (Forest) under Title 21A (see Figure 2). The F zone includes mining and

processing as a permitted use. Mining operations are permitted on Forestry Lands if mining activities are more than one-quarter mile from an established residence and do not use local access streets that abut lots developed for residential use. Otherwise, a Conditional Use Permit is required. Asphalt and concrete processing activities are permitted only if they are accessory to a primary mineral extraction use or are a continuation of an existing mineral processing use.

Periodic review of all extractive and processing operations in King County is conducted at least every five years (KCC 21A.22.050). The periodic review is used to determine if the site is continuing to operate consistent with the most current standards and to establish other conditions as necessary to mitigate identifiable environmental impacts.

2.3.2 Site Vicinity

2.3.2.1 Lower Site

Figure 3 illustrates the zoning pattern in the vicinity. To the immediate west of the Lower Site is an undeveloped strip of land zoned Rural Area, one dwelling unit per 10 acres (RA-10). Access to this RA-10 area is provided by SE 146th St., which also provides primary access to the Lower Site. Farther west, along 468th Ave. SE, are parcels zoned Regional Business (RB) and Industrial (I). The RB parcels contain auto-oriented retail uses, and the I parcels contain businesses with associated outdoor storage and parking. Properties along North Bend Way to the west are zoned RB and contain a mix of forestry, commercial and residential (trailer park) uses. To the northwest is a relatively large area zoned Rural Area, one dwelling unit per 2.5 acres (RA-2.5). This RA-2.5-acre area contains the WoodRiver subdivision and scattered residential uses (it should be noted that the WoodRiver subdivision was vested to the provisions of the general zone that allowed a minimum lot size of 35,000 square feet). To the south and southwest, across I-90, is a relatively large area zoned RA-5.

Properties to the immediate north of the Lower Site are zoned RA-5 and RA-10. The RA-5 zoned area contains several single-family homes, and the RA-10 zoned area contains the Lu residence. Farther north, encompassing a portion of the area bisected by SE Middle Fork Rd. and SE Lake Dorothy Rd., is zoned RA-5 and RA-10. This area contains several rural subdivisions and scattered residences. To the northeast, along SE Middle Fork Rd. and SE Lake Dorothy Rd, properties are zoned Forestry (F). The primarily forested area to the east of the Lower Site is zoned F.

2.3.2.2 Upper Site

Areas to the immediate north, south, east, and west of the Upper Site are zoned Forestry (F). The primary land use in this area is forest production, although the area to the north contains some single-family residences and the area to the east contains the Washington State Fire Training Academy. The area farther south, across I-90, is zoned RA-10.

2.4 DENSITY AND DISTRIBUTION OF RESIDENCES

The distribution and density of residential uses in the vicinity of the sites (within approximately 2 miles) varies greatly, and generally corresponds with the residential density allowed by zoning.

2.4.1 Lower Site

The area west of the Lower Site, in the vicinity of the City of North Bend with primarily RA-2.5, RA-5, RB, and I zoning, contains the majority of residences in the area and the highest residential densities. The WoodRiver subdivision to the west, the Riverbend subdivision farther west across I-90, and the subdivision to the south, across I-90, contain the highest concentration of residences. The WoodRiver subdivision contains approximately 110 homes on an approximately 120-acre site, with an overall residential density of approximately one home per acre. The Riverbend subdivision contains approximately 380 homes on an approximately 175-acre site, with an overall residential density of approximately two homes per acre. The subdivision south of the Lower Site, across I-90, contains approximately 40 homes on an approximately 45-acre site, with an overall residential density of approximately 0.9 homes per acre. Other concentrations of residential uses in the area west of the sites include several trailer parks and small subdivisions along North Bend Way.

The area north of the Lower Site, which is zoned RA-10 and RA-5, contains some residential uses, but at a lower residential density than the area to the west. To the immediate north of the Lower Site is the Lu residence, a single-family home on an approximately 5-acre lot along SE 144th St., and approximately 8 homes on 1- to 5-acre lots on 476th Ave. NE and 475th Ave. SE. The Lu residence and homes on 144th St., 476th Ave. SE, and 475th Ave SE., are the closest residences to the proposed mining and processing areas. Along SE Middle Fork Rd. and SE Lake Dorothy Rd. are several subdivisions with approximately one-acre lots, and scattered residences on lots ranging from approximately 1 to 10 acres in size.

Based on demographic comparison information derived from the Claritas Inc. database, information on the number of households and population of the area was obtained for the year 2000. The area within 1 mile of the western boundary of the Lower Site contained a population of 58 with 22 households. The area within 3 miles of the western boundary of the Lower Site contained a population of 4,302 with 1,492 households.

2.4.2 Upper Site

The area surrounding the Upper Site contains a low residential density. The area immediately surrounding the Upper Site is primarily in forestry use and contains no residential uses. Farther north, approximately 1 mile from the Upper Site, are several single-family homes and small farms along SE Middle Fork Road and SE Lake Dorothy Road. The residential density of this small area is approximately one dwelling unit per 2 acres.

To the south, across I-90, is a mostly forested area with scattered small farms and homes. The residential density in this area is approximately one unit per 40 acres.

Based on demographic comparison information derived from the Claritas Inc. data base, information on the number of households and population of the area was obtained for the year 2000. The area within

approximately 1 mile of the northern boundary of the Upper Site contained a population of 7 with 3 households. The area within approximately 3 miles of the Upper Site contained a population of 714 with 263 households.

As indicated by the above data, the area within 3 miles of the northern boundary of the Lower Site has a significantly higher population and number of households than does the area within 3 miles the Upper Site.

3.0 RELATIONSHIP TO PLANS AND POLICIES

This section discusses the relationship of the Proposal and alternatives to the following applicable land use plans and policies:

- State Growth Management Act
- State Surface Mining Regulations
- State Shoreline Management Act
- Washington State Forest Practices Act
- King County Comprehensive Plan
- King County Zoning Code
- King County Shoreline Management Master Program
- Snoqualmie Valley Community Plan
- North Bend Comprehensive Plan and Vision Plan
- Recreation and Parks Plans, including:
 - National Scenic Byways Program
 - Wild and Scenic Rivers Act
 - Washington State Winter Recreation Program
 - Washington State Trails Plan
 - Washington Scenic Rivers Program
 - King County Park, Recreation and Open Space Plan
 - City of North Bend Park, Recreation and Open Space Plan

3.1 GROWTH MANAGEMENT ACT (GMA)

Summary: *The Growth Management Act (GMA), enacted by the 1990 legislature and amended frequently, contains a comprehensive framework for managing growth and coordinating land use planning with infrastructure. GMA applies to the state's largest and fastest growing jurisdictions.*

The GMA's general planning goals include: directing growth to urban areas; reducing sprawl; providing efficient transportation systems; promoting economic development throughout the state; protecting private property rights; ensuring timely and fair processing of applications; maintaining and enhancing resource-based industries; encouraging retention of open space and habitat areas; protecting the environment; involving citizens in the planning process; ensuring that public facilities are provided at adequate levels

concurrent with planned development; and preserving lands with historical and archaeological significance.

Counties must designate “urban growth areas,” which are areas already characterized by urban growth and within which future urban growth is encouraged and services and facilities are currently or are planned to be available. All cities must be within an urban growth area; unincorporated lands within urban growth areas must be urban in character or adjacent to such lands. Intergovernmental consensus and agreements are intended to establish the urban growth area boundaries; a dispute resolution process is also set forth. The urban growth areas are intended to be large enough, housing densities high enough, and facilities and services sufficient to accommodate population growth over the next 20 years.

Counties must also plan for rural areas to permit rural development, forestry and agriculture in rural areas. Rural areas should provide for a variety of rural densities, uses, essential public facilities, and rural governmental services needed to serve the permitted densities and uses. Rural policies established by the Counties should include measures that apply to rural development and protect rural character.

Among other requirements, jurisdictions subject to the GMA must designate and regulate critical/sensitive areas (including wetlands, geologic hazard areas, critical aquifer recharge areas, fish and wildlife habitat, and flood-prone areas), and resource lands (including agricultural, forest, and mineral resource lands not characterized by urban growth and having long-term commercial significance) (RCW 36.70A.050).

Jurisdictions planning under the GMA must adopt development regulations to ensure the conservation of agricultural, forest, and mineral resource lands and the protection of critical areas. The Washington Administrative Code (WAC) implementing GMA recognizes that sprawl and unwise development of natural resource lands may lead to inefficient use of limited public resources. Guidelines within the WAC recommend that mineral resource lands, designated pursuant to the Act, include areas from which the extraction of minerals occurs or can be anticipated, including land with long-term commercial significance for extracting sand and gravel. In classifying mineral resource lands, cities and counties must also consider the effects of proximity to population areas and the possibility of more intensive uses of the land as indicated by general land use patterns in the area, availability of utilities, etc. (WAC 365-190-070, (2) (d)).

Regulations for identified natural resource lands must ensure that adjacent land uses would not interfere with the continued use of these designated lands, in the accustomed manner, and in accordance with best management practices.

Discussion: Consistent with the Growth Management Act, King County’s Comprehensive Plan utilizes land use designations to ensure the conservation of resource lands in King County. Agricultural, forest and mineral resource designations establish the primary uses outside of the “Urban Growth Areas” to minimize conflicts between urban/suburban uses and resource uses. The King County Comprehensive Plan designates the sites as “Forest Production District,” which classifies mineral resource mining as a permitted use. The Comprehensive Plan envisions mineral resource operations located in areas with low residential densities to minimize potential compatibility impacts (refer to the *Land Use* section for a discussion on land use compatibility).

3.2 STATE OF WASHINGTON SURFACE MINING REGULATIONS (RCW CHAPTER 78.44)

***Summary:** The State Surface Mining Act was amended in 1993 (SB 5502, Chapter 418, Laws of 1993), and provides guidelines and requirements for the reclamation of mining sites. The State Department of Natural Resources (DNR) requires Reclamation Plans (Section 12) to be prepared according to the Minimum Reclamation Standards (Section 21). DNR then must evaluate and approve the proposed reclamation plans. Final approval by DNR would not be granted until the proposed Grading Plan and any other required permits are approved by King County.*

Section 78.44.141. of the new Surface Mining Act provides minimum standards for the reclamation of surface mines permitted after June 30, 1993.

3.2.1 78.44.141. Reclamation - Minimum Standards - Waiver

(4) All surface-mined slopes shall be reclaimed to the following minimum standards:

(a) In surface mines in soil, sand, gravel, and other unconsolidated materials, all reclaimed slopes shall:

(i) Have varied steepness;

(ii) Have a sinuous appearance in both profile and plan view;

(iii) Have no large rectilinear topographic elements;

(iv) Generally have slopes of between 2.0 and 3.0 feet horizontal to 1.0 foot vertical or flatter except in limited areas where steeper slopes are necessary in order to create sinuous topography and to control drainage;

(v) Not exceed 1.5 feet horizontal to 1.0 foot vertical except as necessary to blend with adjacent natural slopes;

(vi) Be compacted if significant backfilling is required to produce the final reclaimed slopes and if the department determines that compaction is necessary.

(b) Slopes in consolidated materials shall have no prescribed slope angle or height, but where a severely hazardous condition is created by mining and that is not indigenous to the immediate area, the slopes shall not exceed 2.0 feet horizontal to 1.0 foot vertical. Steeper slopes shall be acceptable in areas where evidence is submitted that demonstrates that the geologic or topographic characteristics of the site preclude reclamation of slopes to such angle or height or that such slopes constitute an acceptable subsequent use under local land use regulations. (7) Revegetation shall be required as appropriate to stabilize slopes, generate new topsoil, reduce erosion and turbidity, mask rectilinear contours, and restore the scenic value of the land to the extent feasible as appropriate to the approved subsequent use. Revegetation shall normally meet the following standards:

- (a) Revegetation shall commence during the first proper growing season following restoration of slopes on each segment unless the department has granted the permit holder a written time extension.*
- (c) Revegetation generally shall include but not be limited to diverse evergreen and deciduous trees, shrubs, grasses, and deep-rooted ground cover.*
- (i) For western Washington, nitrogen-fixing species including but not limited to alder, white clover, and lupine should be included in dry areas. In wet areas, tubers, sedges, wetland grasses, willow, cottonwood, cedar, and alder are appropriate.*

Administration of this program is conducted through the State Department of Natural Resources (DNR). The Department has review, site inspection, and approval authority over all surface mining and reclamation plans.

Discussion: A preliminary reclamation plan to meet the statutory requirements of the Surface Mine Reclamation Act (RCW Chapter 78.44) has been drafted and submitted to the State Department of Natural Resources (DNR) by Cadman, Inc. Site reclamation would be accomplished in discrete segments as mining reserves are depleted in a given area. This phased approach allows revegetation to be initiated at the earliest time practical. Consistent with the Washington Department of Natural Resources requirements, site reclamation for the Proposal would be accomplished by the following four steps: 1) Pre-mining site preparation, including use of onsite overburden material; 2) Slope stabilization and erosion control, including stormwater control and temporary erosion-control measures such as hydroseeding and filter fence check dams; 3) Final Contouring and topsoil placement; and 4) Revegetation with grasses, shrubs and trees.

3.3 WASHINGTON SHORELINE MANAGEMENT ACT (RCW CHAPTER 90.58) AND KING COUNTY SHORELINE MANAGEMENT MASTER PROGRAM (K.C.C. TITLE 25)

Summary: *The Legislature enacted the Shoreline Management Act (SMA) in 1971 to protect the public interest associated with shorelines of the state while, at the same time, recognizing and protecting private property rights consistent with the public interest. The primary mechanism for implementing the Act is the adoption of Shoreline Master Programs (SMP), which must be approved by local governments and the Department of Ecology. King County has adopted a Shoreline Master Program and an implementing Shoreline Management Code.*

The SMA establishes two basic categories of shoreline: “shorelines of state-wide significance,” which are identified in the SMA; and “shorelines” that includes all of the water areas of the state, including reservoirs, and their associated wetlands, together with the lands underlying them. For properties containing “shoreline” area, the Shoreline Master Program regulates property from the Ordinary High Water Mark to a line 200 feet landward. Four different environmental designations, which establish policies and regulations for various types of land uses within the shoreline jurisdiction of each element, have been provided. The environmental designations are: Natural Environment; Conservancy Environment; Rural Environment; and Urban Environment.

The purpose of the King County Shoreline Management Master Program (Shoreline Master Program) is to implement the Washington State Shoreline Management Act of 1971 and to provide for the regulation of development which impacts those areas of King County under the jurisdiction of the Shoreline Management Act. The Shoreline Master Program regulates property from the Ordinary High Water Mark to a line 200 feet landward. Four different environmental designations, that establish policies and regulations for various types of land uses within the shoreline jurisdiction of each element, have been provided. The environmental designations are: Natural Environment; Conservancy Environment; Rural Environment; and Urban Environment.

Discussion: Neither the Upper nor Lower Sites contain any water features containing King County Shoreline Environments. The Middle Fork Snoqualmie River north of the sites is designated “Conservancy Environment” to the north of the Lower Site and “Natural Environment” to the north of the Upper Site. The South Fork of the Snoqualmie River is designated “Conservancy Environment.” The Proposal contains no area under King County shoreline jurisdiction, and the regulations of the King County Shoreline Management Master Program do not apply to the Proposal.

3.4 WASHINGTON STATE FOREST PRACTICES ACT - RCW 76.09

Summary: *The Washington Forest Practices Act was designed to protect water quality, fish, wildlife, and public capital improvements while maintaining a viable forest products industry by keeping forest land productive and maintaining or enhancing flexibility of operations. The goals of the Forest Practices Act include affording protection to and encouraging timber growth by requiring minimum reforestation of commercial tree species on forest lands as will reasonably utilize timber growing capacity of the soil following current timber harvest; affording protection to forest soils and public resources by utilizing all reasonable methods of technology in conducting forest practices; recognizing both the public and private interest in the profitable growing and harvesting of timber; providing for necessary interagency input and intergovernmental and tribal coordination and cooperation; and considering reasonable land use planning goals and concepts contained in local comprehensive plans and zoning regulations.*

The Forest Practices Act contains rules establishing classes of forest practices, listed as Class I, Class II, Class III and Class IV. Class I forest practices are generally defined as minimal or specific forest practices that have no direct potential for damaging a public resource and that may be conducted without submitting an application. Class II forest practices are defined as those that have a less than ordinary potential for damaging a public resources that may be conducted without submitting an application. Class III forest practices are defined as practices other than those defined for Class I, II or IV. Class III forest practices require a permit. Class IV forest practices include those practices (other than Class I and II practices) that occur on lands platted after January 1960, occur on land planned to be converted to urban development. If the application of notification does not state that any land covered by the application or notification will be or is intended to be converted, the County shall deny any applications for nonforestry uses for six years after the date of the application.

Discussion: A Forest Practices Permit would be required for the clearing of forest land prior to initiation of mining activity. It is anticipated that a Class III Forest Practices Permit would be required.

3.5 KING COUNTY COMPREHENSIVE PLAN (1994)

Summary: *The Plan's policies regarding Resource Lands are intended to satisfy Goal 8 of the Growth Management Act - to maintain and enhance natural resource-based industries including agriculture, forestry, and mineral resource extraction. The King County Comprehensive Plan states that the growing, harvest, extraction, processing and use of products from Natural Resource Lands, which include forests, farms and mineral resource lands play an important role in King County's economy by providing jobs and products for local use and export. Natural Resource Lands, which include forests, farms and mineral resource lands, also provide links to King County's cultural heritage, scenic views and environmental benefits such as enhanced air and water quality. In large measure, King County's quality of life is dependent upon the thoughtful planning and sound management of these Natural Resource Lands to ensure their long-term conservation and productive use.*

3.5.1 Rural Land Use Policies

Summary: *Policy R-101 states that it is a fundamental objective of the King County Comprehensive Plan to maintain the character of its designated Rural Area. Therefore, King County's land use regulations and development standards should protect and enhance the following:*

- Environmental quality, especially wildlife and fisheries, aquifers and surface waters;
- Commercial and non-commercial farming, forestry, fisheries, mining and cottage industries;
- Historic resources, historic character and continuity including archaeological and cultural sites important to tribes;
- Community and small-town atmosphere, safety, and locally-owned small businesses;
- Economically and fiscally healthy rural cities and unincorporated towns and neighborhoods with clearly defined identities compatible with adjacent rural, agricultural, forestry and mining uses;
- Regionally significant parks, trails and open space; and,
- A variety of low-density housing choices compatible with adjacent farming, forestry and mining and not needing urban facilities and services.

Discussion: The King County Comprehensive Plan identifies the project sites and the area to their immediate east as Forestry and within the Forest Production District, which classifies mineral resource mining as a permitted use. Areas to the immediate north and west of the Lower Site are designated Rural Residential. Both the Forestry and Rural Residential designations are intended to preserve rural character. The residential densities allowed in the Rural Residential zones (2.5 to 10 dwelling units per acre) are intended to be compatible with Forest District Uses, including mining.

With the proposed mitigating measures, it is not anticipated that water and natural habitat functions would be significantly impacted. Refer to the *Water and Environmental Health* and *Plants and Animals* sections for details.

Summary: *Policy R-214 states that rural residential development adjacent to Agricultural and Forest Production Districts should minimize conflicts with resource uses. Residences next to Forest Production Districts should have greater setbacks for safety.*

Discussion: The project sites are designated Forest Production District. Lands adjacent to the sites are designated either Forest Production District or Rural Residential. The Rural Residential designated lands are located north and west of the Lower Site. Proposed mining activities would be located a minimum of 50 feet from the western site boundary and approximately 700 feet from the northern site boundary. The setbacks provided on the sites, along with setbacks provided on adjacent properties, would be anticipated to provide for adequate safety.

3.5.2 Resource Conservation Strategy Policies

Summary: *Policy RL-101 states that King County should promote forestry, agriculture, mining and other resource-based industries as a part of a diverse, regional and sustainable economy.*

Policy RL-102 states that King County shall conserve farm lands, forest lands and mineral resources for productive use through the use of Designated Agriculture and Forest Production Districts and Designated Mineral Resource Sites where the principal and preferred land uses will be commercial resource management activities.

Policy RL-103 states that land uses, utilities and transportation facilities adjacent to designated Agriculture and Forest Production Districts and Designated Mineral Resource Sites should be sited and designed to ensure compatibility with resource management activities.

Discussion: The King County Comprehensive Plan identifies the site as “Forest Production District,” which classifies mineral resource mining as a permitted use. The proposal would extract resources for a productive use. With the exception of the area to the immediate west of the Lower Site, the lands surrounding the sites are also designated “Forest Production District.” The existing utility and transportation facilities in the vicinity of the sites are compatible with resource mining.

3.5.2.1 Forest Lands Policies

Summary: *Policy RL-201 states that the primary land use within the Forest Production District should be commercial forestry. Other resource uses, such as mining and agriculture, should be permitted within the Forest Production District when managed to be compatible with forest management.*

Discussion: According to the Forest Lands Map of the King County Comprehensive Plan, the site is located within the Forest Production District. The Proposal would temporarily convert forest land to surface mining use. Proposed reclamation includes planting of trees suitable for future forestry practices on the site. The Proposal would not permanently convert forest land to other uses. Proposed mining and processing on the site would not be anticipated to be managed in a manner considered compatible with forest management.

3.5.2.2 Mineral Resource Policies

Summary: *Policy RL-403 requires, in order to not knowingly preclude future use of mineral resources, that King County identify on the Comprehensive Plan Land Use Map all Potential Mineral Resource Sites. With the exception of sites in the Forest Production District, Potential Mineral zoning should be applied to such sites.*

Discussion: The discussion in the Comprehensive Plan elaborating on the intent of Policy 403 states that “Potential Mineral Resource Sites in the Forest Production District should not receive Potential Mineral zoning because they are a permitted use in the F-zone, and minimal land use conflicts are anticipated.” Because the sites are located in the Forest Production District, the mineral resource is already protected from urban development and the Potential Mineral Resource Site designation is not applicable. However, the Mineral Resource Map of the Comprehensive Plan indicates that both the Lower and Upper Sites potentially contain mineral resources and are identified as Potential Surface Mineral Resource Sites.

The Comprehensive Plan discussion on Designated and Potential Mineral Resource Sites states “Identification of Potential Mineral Resource Sites satisfies GMA requirements to not knowingly preclude opportunities for future mining and to inform nearby property owners of the potential for future mining use of these areas in order to prevent or minimize impacts.”

Summary: *Policy RL-404 states that King County shall undertake updates to the Mineral Resource Map of the Comprehensive Plan to identify additional Potential Mineral Resource Sites for conservation and remove those sites that no longer can be used for mineral resources.*

Discussion: The Lower and Upper Sites are designated as Potential Mineral Resource Sites on the Mineral Resources Map of the King County Comprehensive Plan (refer to the discussion under Policy RL-403 above).

Summary: *Policy RL-405 requires King County to apply zoning or other approvals as appropriate for mineral extraction and processing following site-specific environmental study, sufficient public notice and comment opportunities, and when:*

- The proposed site contains rock, sand, gravel, coal, oil, gas, or other mineral resources, and;
- The proposed site is large enough to confine or mitigate all operational impacts, and;
- The proposal will allow operation with limited conflicts with adjacent land uses when mitigating measures are applied, and;
- Roads or rail facilities serving or proposed to serve the site can safely and adequately handle transport of products and are in close proximity of the site.

Discussion: The sites contain sand and gravel resources. Both sites are relatively large, with approximately 65 percent of the Lower Site and 60 percent of the Upper Site proposed to remain in their existing vegetated condition. Mitigation measures, including vegetated buffers, phased mining, phased reclamation, and noise and view berms, have been identified to minimize conflicts with adjacent land uses. It is anticipated that the existing area roadway network is sufficient to handle anticipated truck traffic to serve the local and regional

market. Refer to the *Land Use Patterns* and *Transportation* sections of this document for a complete discussion.

Summary: *Policy 407 states that King County should permit mining activity within the Forest Production District. However, a conditional use permit should be required for proposals to conduct mining activities within one-quarter mile of established residences or for proposals seeking to use local access streets where abutting lots are developed for residential use.*

Discussion: The Lower and Upper Sites are within the Forest Production District. King County has determined that the residential accessory structure on the Lu property is an established residence for the purposes of KCC 21A.080.090(B), and is within one-quarter mile of mining activities on the Lower Site proposed under Alternative 2. The proposed asphalt and concrete processing facilities would process material mined on the Lower and Upper Sites, and would be considered accessory to a primary mineral extraction use.

Summary: *Policy RL-408 states that in order to completely assess the environmental impacts associated with a decision to grant zoning, conditional use, or operating approval for a specific parcel, the range of environmental impacts shall be assessed at the earliest possible stage. This should include the potential for future proposals for structures and operations related to mining, such as asphalt and concrete batch plants.*

Discussion: The environmental impacts anticipated under the Proposal are analyzed in this Environmental Impact Statement.

Summary: *Policy RL-411 states that conditions and mitigations for significant adverse environmental impacts associated with mining operations should be required, especially in the following areas:*

- Air quality;
- Environmentally sensitive and critical areas, such as surface and groundwater quality and quantity, wetlands, fisheries and wildlife habitats;
- Noise levels;
- Vibration;
- Light and glare;
- Vehicular access and safety;
- Visual impacts;
- Cultural and historic features and resources;
- Site security; and
- Others unique to specific sites and proposals.

Discussion: The conditions and mitigation measures for each of the elements listed above are outlined in their respective sections in the Environmental Impact Statement. Measures to minimize anticipated impacts on air quality, noise levels, vehicular access and safety, visual conditions, and cultural and historic resources are provided in their respective sections and summary chapter of this Draft EIS.

Summary: *Policy 413 states that King County should work with the State Department of Natural Resources to ensure that mining areas are reclaimed in a timely and appropriate manner. Where mining is completed in phases, reclamation also should be completed in phases as the resource is depleted.*

Discussion: Following the conclusion of mining activities, consistent with the requirements of the Department of Natural Resources, the phased reclamation of the sites would include the following: 1) Pre-mining site preparation, including use of onsite overburden material; 2) Slope stabilization and erosion-control, including stormwater control and temporary erosion control measures such as hydroseeding and filter fence check dams; 3) Final contouring and topsoil placement; and 4) Revegetation with trees.

3.5.2.3 Planning and Implementation Policies

Summary: *Prior to the adoption of the King County Comprehensive Plan in 1994, King County had 13 adopted community plans. These community plans contained more specific policies, guidelines, and criteria to guide land use development within these communities. The Snoqualmie Valley Community Plan was adopted in 1989 and contained policies specific to the valley, including policies related to resource uses.. Where applicable, the policy direction of the community plans, including the Snoqualmie Valley Community Plan, was incorporated into the adopted King County Comprehensive Plan*

Discussion: Many of the Snoqualmie Valley Community Plan policies related to mineral extraction in the Snoqualmie Valley were incorporated into the King County Comprehensive Plan. Mineral extraction policy direction from the Snoqualmie Valley Community Plan incorporated in the King County Comprehensive Plan include: policies related to minimizing residential density in Forest Production Districts (KCCP Policy R-214); policies supporting mineral extraction when the environment is protected (KCCP Policies RL-405 and RL-411); and, reclamation of mining extraction sites (KCCP Policy RL-413). Refer to the King County Comprehensive Plan section of this report for a discussion on these policies.

3.6 KING COUNTY ZONING CODE (TITLE 21A)

Summary: *Zoning Designation and Permitted Uses - The King County Zoning Code implements the King County Comprehensive Plan's policies and objectives. The proposed sites are zoned F (Forestry) under Title 21A. The F zone includes mining and processing as a permitted use. Mining operations are permitted on Forestry Lands if the operations are more than one-quarter mile from an established residence and do not use local access streets that abut lots developed for residential use. Asphalt and concrete processing activities are permitted only if they are accessory to a primary mineral extraction use or are a continuation of an existing mineral processing use.*

Discussion: The Lower and Upper Sites are within the Forest Production District and are zoned F. King County has determined that the residential accessory structure on the Lu property is an established residence for the purposes of KCC 21A.080.090(B), and is within one-quarter mile of mining activities on the Lower Site proposed under Alternative 2. Mining activities on the Lower Site would be located within one-quarter mile of the accessory structure and a Conditional Use permit would be required for mining on the Lower Site under Alternatives 2 and 3. Because mining activity on the Lower Site under Alternatives 2A and 3A would be more than one-quarter mile from the accessory structure, a Conditional Use Permit would not be required for this alternative.

The proposed primary access to the Lower Site (SE 146th Street) abuts two lots zoned Rural Area-10 (RA-10). Although zoned residential, the lots are not developed with residential structures and would not be considered developed for residential use. The Edgewick Inn is located on a Regional Business (RB) zoned property at the southeast corner of SE 146th Street/468th Avenue SE. According to section 21A.08.030 of the King County Zoning Code, hotel/motel use (SIC #7011) is considered a commercial use, not a residential use, and is only allowed in commercial zones. In conclusion, the proposed access to the Lower Site from SE 146th Street would not abut lots developed for residential use and access would not require a Conditional Use Permit.

King County Code Chapter 21A.08 defines permitted uses within specified zoning districts. Proposed mining and asphalt/concrete mixing and blocking uses would occur within the Forest zone district. King County Code 21A.08.090(B) provides that Asphalt/Concrete Mixtures and Block uses are permitted in the Forest zone “only as accessory to a primary mineral extraction use or as a continuation of a mineral processing use established prior to the effective date of or consistent with this code.” While the term “accessory” is not specially defined, the term contemplates a use that is subordinate and incidental to a principal or main use. Proposed asphalt/concrete mixing and blocking would occur only in conjunction with the primary excavation activity conducted for this project within the same zone district. Sand and gravel material used in such activity would be excavated from the upper and lower portions of the site. Excavated material would be transferred from the upper to lower upper site areas by way of a conveyor. The conveyor would be located within an easement area that was retained by Weyerhaeuser to retain the connection between upper and lower portions of the site for purposes of the proposed gravel mining operation. The use is thus accessory to the primary mineral extraction use contemplated and is therefore allowed.

CUP approval is not required for the placement of passive noise attenuation berms within the 1/4-mile area. Such berms do not constitute “mining activities” for the purposes of KCC 21A.08.090(B). The berms do not play an active role in the mineral excavation or processing operation or generate mining activity impacts that the CUP one-quarter-mile threshold is intended to address.

Proposed mining activities on the Upper Site would be located approximately 2,000 feet from residences to the south of the site along SE 172nd Street, and a Conditional Use Permit would not be required for mining on the Upper Site.

Periodic review of all extractive and processing operations in King County is conducted at least every five years (KCC 21A.22.050). The periodic review is used to determine if the site is continuing to operate consistently with the most current standards and to establish other conditions as necessary to mitigate identifiable environmental impacts.

Summary: *Development Standards and Operating Standards. The development standards for mineral extraction operations are provided in chapter 21A.22 of the Zoning Code. Specific site design standards are as follows:*

- the minimum site area must be 10 acres;
- extractive operations on sites larger than 20 acres must occur in phases;

- the minimum number of parking spots required is not specified; the director would establish the minimum requirement based on a study of anticipated parking demand;
- fences that are at least 6 feet in height above the grade must be provided onsite to discourage access to hazardous areas such as active extracting, processing, stockpiling and loading areas; where there are unstable slopes; and where any settling pond or other stormwater facility is present;
- fences must also have lockable gates at all openings, be no more than 4 inches from the ground to fence bottom, and be in good repair;
- warning and trespass signs advising of the extractive operations must be placed on the perimeter of the site adjacent to RA, UR or R zones at intervals no greater than 200 feet along any unfenced portion of the site where hazardous activities are occurring;
- buildings or structures used in the processing of materials must be no closer than 100 feet from UR or R zoned properties except that the setback may be reduced to 50 feet when the grade where such buildings or structures are proposed is 50 feet or greater below the grade of the adjacent UR or R zoned property;
- buildings or structures used in the processing of materials must be no closer than 20 feet from any other zoned property, except when adjacent to another extractive site, or from any public street;
- offices, scale facilities, equipment storage buildings and stockpiles shall not be closer than 20 feet from any property line except when adjacent to another extractive site;
- no clearing, grading or excavation, excluding that necessary for roadway or storm drainage facility construction, would be permitted adjacent to another extractive operation provided that such activities may be pursuant to an approved reclamation plan;
- landscaping must be provided along any portion of the site perimeter where disturbances such as site clearing and grading, or mineral extraction or processing is performed, except where adjacent to another extractive operation;
- lighting must be limited to that required for security, lighting of structures and equipment, and vehicle operations, and not direct glare onto surrounding properties.

Operating standards set forth in the Zoning Code and pertinent to the proposed project are as follows:

- applicable noise standards for operations would be those required by King County Noise Ordinance or as required by project-specific SEPA mitigation, whichever is more stringent;
- dust and smoke produced by extractive operations must not substantially increase the existing levels of suspended particulates at the perimeter of the site and must be controlled by watering of the site and equipment or other methods specified by the County;
- the applicant must provide for measures to prevent transport of rocks, dirt and mud from trucks onto public roadways;

- traffic control measures as determined by the County must be provided by the applicant during all hours of operation;
- the applicant is responsible for cleaning debris or repairing damage to roadways caused by the operation.

Discussion: All regulations set forth in the King County Zoning Code would be adhered to by the applicant. The site area would exceed 10 acres, and mining operations would be phased. Fencing would be provided on the perimeter of the sites to discourage access. Warning and trespass signs would be provided along the site boundary, as appropriate. All lighting would utilize “low pressure sodium” bulbs and would utilize “full cutoff luminaries” to minimize lighting impacts. All applicable King County air quality and noise standards would be adhered to (it should be noted that the recommended design changes would need to be implemented to ensure that the proposed mining operations would meet the standards of the King County Noise Code).

Summary: *Sensitive Areas. Chapter 24 of the King County Zoning Code requires protection of defined sensitive areas, including wetlands, streams, and flood, erosion, landslide, seismic and coal hazard areas. The King County Sensitive Areas Map Folio indicates that the Lower Site may contain an unclassified stream and that a portion of the Upper Site may contain an erosion hazard area.*

Discussion: To minimize the potential for erosion impacts from mining on the sites, all excavation and reclamation would occur in accordance with state statutes of the Mine Safety and Health Act and the Surface Mining Act. To minimize potential impacts on surface waters, including streams, a detailed stormwater drainage plan, which outlines the necessary mitigation measures required, would be prepared. Stormwater facilities, such as settling ponds, infiltration ponds, swales, and drainage ditches, would be constructed.

3.7 NORTH BEND COMPREHENSIVE PLAN AND VISION PLAN

3.7.1 Comprehensive Plan

Summary: *The North Bend Comprehensive Plan, adopted in May 1995, was developed to respond to the state’s Growth Management Act and its direction for a realistic assessment of what North Bend is today and what it will become over the next two decades.*

The North Bend Vision Plan, compiled in November 1992, attempts to reflect the overall vision for the future by North Bend citizens. The North Bend Vision Plan forms the basis of many of the goals and policies of the North Bend Comprehensive Plan.

According to the Introduction to the North Bend Comprehensive Plan, the goals of the Comprehensive Plan are underlain by two principal themes: first, the desire of the community to maintain and enhance its rural character, its natural features, and its small-town scale of development; and second, the desire to protect and preserve environmentally sensitive lands, scenic vistas, and open spaces by integrating both new development and redevelopment into the community in a manner that respects the natural environment.

The North Bend Comprehensive Plan goals that most relate to the Proposal are those contained in the Land Use and Sensitive Areas chapters. Relevant goals of the Land Use and Sensitive Areas chapters are listed below.

3.7.1.1 Land Use

Summary: LU-Goal 1: *Maintain residential quality and neighborhood livability suitable for a rural town.*

LU-Goal 6: *Promote economic diversification and increase local employment opportunities.*

LU-Goal 10: *Preserve and enhance the visual and physical accessibility of significant natural features having scenic and public recreational values.*

Discussion: The Proposal would not be anticipated to result in a change to the overall residential neighborhood character of the area. However, proposed mining and processing would result in a level of intensity significantly greater than that of the existing single-family and Lu residence uses to the immediate north of the Lower Site, and could be considered an incompatible use. The Proposal would not be anticipated to significantly impact existing views from most areas. However, from residential uses immediately north of the Lower Site and some recreational areas at higher elevations, views to the sites would be affected.

3.7.1.2 Sensitive Areas

Summary: SA-Goal 1: *Protect the natural hydraulic, hydrologic and habitat functions, scenic, and recreational value of streams.*

SA-Goal 9: *Protect existing resource lands.*

Discussion: With proposed mitigation measures, it is not anticipated that significant impacts on existing water and natural habitat functions would be significantly impacted. Refer to the *Water and Environmental Health* and *Plants and Animals* sections for details.

3.7.2 North Bend Vision Plan

Summary: *The North Bend Vision Plan (Vision Plan) was developed in 1992 by the City of North Bend with funding assistance provided by State of Washington Growth Management Appropriations. The purpose of the Vision Plan was to provide a clear vision for the future character of North Bend.*

A consensus of the future character of North Bend was developed using a three-part process, which began with North Bend planners compiling a list of ways in which the city is growing and where a common vision is needed. They included the following areas of development: single and multi-family housing; business and industry; rural character; transit; open space; and river access.

In the second part of the process, 220 photographs of North Bend and other developing areas were selected. These images depicted a variety of approaches to design issues that confront the city. The second stage culminated in two public meetings, attended by 108 participants -- merchants, property owners, developers,

city planning officials, neighborhood activists, and other interested citizens -- who participated in a Visual Preference Survey (VPS).

The VPS is a technique for developing a common vision for a community that is derived from the collective wants and desires of local citizens. The VPS is based on the community's evaluation of its perceived visual image. The image includes such features as public buildings, houses, stores, parks, streets, and open spaces.

Survey participants rated projected 35mm images on a scale of + (positive) 10 to (negative) 10. Higher scores were given to images that participants felt both visually and functionally demonstrated an appropriate vision for their community. These images depicted development forms that the participants would like North Bend to emulate. Lower scores were given to images that were not felt to be appropriate for North Bend. Participants rated images they did not feel strongly about as neutral (0).

In the final step in the process, North Bend planners collected all the ratings and calculated the average (mean) score for each photographic image. Images that seemed to epitomize the opinions of the group were selected. Those pictures were incorporated into the Vision Plan, with the average score printed above each image. The pictures with a positive rating indicate how the selected citizens want the city to look; those with a negative rating tell the city what images and forms of development to avoid.

The image of Mount Si received the highest rating of all of the images in the VPS. Other highly rated images included streetscapes with wide sidewalks and pedestrian-friendly elements, and images of rural landscapes. Images with the lowest ratings included auto-oriented strip malls, parking lots, and large apartment complexes

Discussion: The North Bend Vision Plan does not include any photographs of, or reference to, surface mining operations. Proposed mining and processing would not be anticipated to result in a change to the overall residential neighborhood character of the area. However, proposed mining and processing would result in a level of intensity significantly greater than that of the existing single-family and Lu residence uses to the immediate north of the Lower Site, and could be considered an incompatible use.

The Proposal would not be anticipated to significantly impact existing views from most areas. However, from residential uses immediately north of the Lower Site and some recreational areas at higher elevations, views to the sites would be affected.

3.8 RECREATION AND PARKS PLANS

3.8.1 Wild and Scenic Rivers Act (P.L. 90-542) (1968)

Summary: *The Wild and Scenic Rivers Act ensures that “certain selected rivers... shall be preserved in a free flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.” Rivers are selected according to scenic, recreational, geologic, fish and wildlife, historic, and cultural values for inclusion in the National Rivers Inventory. There are three classes of river areas defined under the Act: 1) wild river areas, 2) scenic river areas, and 3) recreational river areas. Under the Act, federal agencies may not assist with the construction of water-*

resource projects that would have a direct and adverse effect on the free-flowing, scenic and natural values of a wild and scenic river.

Discussion: The Middle Fork of the Snoqualmie River is listed on the Nationwide Rivers Inventory and has been recommended for Wild and Scenic River designation by the US Forest Service. The Proposal does not include construction of water-resource projects that would have a direct adverse effect on the free-flowing, scenic and natural value of the Middle Fork. The considered sites are not visible from most recreational facilities along the river and would not be considered inconsistent with the Wild and Scenic Rivers Act.

3.8.2 Washington Winter Recreation Program (1992)

Summary: *The Winter Recreation Plan was developed by the Washington State Parks and Recreation Commission, focusing on snowmobile and Nordic ski recreation areas. King County is located in Region 2 of the Plan, which accounts for 71% of statewide demand for snow activities and is the destination for 50% of households participating in snow activities. The Plan provides information on the location of winter recreation activity in the state and establishes objectives for improving recreation services.*

Discussion: The Proposal would not provide winter recreational facilities or public access, or be expected to affect demand for existing winter facilities. Some displacement of existing informal winter trail use could occur, and the aesthetic quality of views from surrounding mountainsides (used for skiing and snowshoeing) could be affected (refer to the *Aesthetics, Light and Glare* section for details on visual impacts).

3.8.3 State of Washington Outdoor Recreation and Habitat: Assessment and Policy Plan 1995-2001

Summary: *It is a policy of the state to provide an adequate supply of outdoor recreation lands and facilities, wildlife habitat, and open space. RCW 43.99.025(3) calls for the Washington Interagency Committee for Outdoor Recreation (WIAC) to prepare and update a strategic plan for the acquisition, renovation, and development of recreational resources and the preservation and conservation of open space. The Plan sets state goals for acquisition and development of walking and biking trails in populated areas, water access sites, parks (including but not limited to camping areas, natural open space, unpaved trails, picnic areas, and water viewpoints). The Plan recognizes the need for recreation development offered by the private sector.*

Discussion: The Proposal would not provide onsite recreational facilities or public access. The Proposal would not be expected to affect demand for recreational facilities or influence the WIAC's ability to implement the Assessment and Policy Plan (refer to the *Recreation* section for additional details).

3.8.4 Washington State Trails Plan (1991)

Summary: *The Washington State Trails Plan is an element of the Statewide Comprehensive Outdoor Recreation Planning Program (1990-1995). The Policy and Action Document of the Washington State Trails Plan provides statistical data and research findings, and discussion of key issues surrounding trail-based recreation. King County is located in Planning District 4 of the Plan, which includes 1,436 miles of hiking trails, 59 miles of mountain bicycle trails, 83 miles of ORV trails, 148 miles of cross-country ski*

trails, 612 pack and saddle trails, and 107 snowmobile trails. The Plan defines the following current goals for the trail programs of the state:

- develop new trails and paths in city and county jurisdictions to add 50% more city and county trail miles statewide by the year 2000;
- connect trail systems and populated areas via trails and paths;
- establish appropriate corridors and rights-of-way for trails;
- increase the miles of trail available in semi-primitive and other remote settings; and
- implement trail elements of national forest plans and other federal agency plans at preferred alternative levels.

Discussion: The proposal would not provide onsite recreational facilities, trails, or public access. The project would not be expected to affect demand for existing recreational facilities or prevent implementation of the Plan. Scenic views from high-elevation trails and state lands trails in the vicinity (such as the Mount Si Natural Resources Conservation Area) would be altered under the project. However, impacts would not likely significantly change the character of views because the sites and a portion of the surrounding area have been excavated and/or cleared in the past.

3.8.5 Washington Scenic Rivers Program (1977)

Summary: *The Washington State Scenic Rivers Program was created by the Legislature in 1977 (RCW 79.72) for the purpose of balancing the use and development of rivers with a concerted effort to protect a few of Washington's rivers. The Skykomish River was designated as the first Scenic River in the program. In 1987, other rivers were evaluated by state agencies for future designation under the program.*

Discussion: The Middle Fork and South Fork of the Snoqualmie River have not been designated as scenic rivers by the state; the program is not applicable to the Proposal.

3.8.6 King County Park, Recreation and Open Space Plan (1996)

Summary: *The King County Park, Recreation and Open Space Plan provides vision for management of the County recreation system through 2012. The Plan implements the policies of the King County Comprehensive Plan and provides guidance for planning, acquisition, and development. Policies aim to establish a County system that is valued for conserving environmental quality and scenic beauty; offers social educational and recreation opportunities; and contributes to the economic health of the region. In addition to public park and open space ownerships in the vicinity of the Proposal, King County has purchased development rights through its Farmland Preservation Program to preserve open space northwest of North Bend. The following directives within the Plan are relevant to the Proposal (note: these directives reflect the intent of King County Comprehensive Plan park, recreation and open space policies):*

- King County should add significant natural areas that include regionally significant features and improve the distribution of property across the County;
- King County will work with a variety of public and private groups to identify and protect significant natural areas;

- King County will focus its open space efforts on nine natural systems, including the Snoqualmie system;
- King County will focus its protection and enhancement efforts on seven recreation and open space systems, including the Snoqualmie Valley Regional Trail System and the Mountains to Sound Greenway;
- King County shall strive to maintain the existing wildlife diversity and habitat in the county and maximize wildlife diversity in the rural area;
- King County will pursue wildlife habitat protection goals through the integration of wildlife habitat and conservation goals into new developments and demonstrate leadership in habitat protection and stewardship through land management practices; and
- King County will work with nearby property owners, agencies and the public to protect the character, function and natural resources of parks and the open space system.

Discussion: The project sites are not identified for future acquisition by King County, and proposed site management does not include provision of onsite recreational facilities, trails, or public access. The Proposal would not be expected to affect demand for existing County facilities; however, the character of views from high-elevation trails (primarily in the Mount Si Natural Resources Conservation Area) would be altered. Approximately 44% of the Lower Site would be undisturbed, and two screening berms would be constructed to protect the aesthetic value of the Greenway corridor. However, short-term aesthetic impacts in the Greenway would occur during berm construction. For the upper project site, 60% would be left undisturbed. The Upper Site would not be visible from I-90 or the existing recreational facilities along the Middle Fork of the Snoqualmie River (refer to the *Aesthetics, Light and Glare* section for complete details). The Proposal is not inconsistent with the County Park, Recreation and Open Space Plan.

3.8.7 City of North Bend Park, Recreation and Open Space Plan (1995)

Summary: *The Park, Recreation and Open Space Plan was adopted by the City as an element of the North Bend Comprehensive Plan. The overall goals of the Plan focus on preserving an outdoor greenway, trail, park and open space system for the future, and providing recreational opportunities to all segments of the population (for both living in the City and those attracted to the area). The following objectives within the Plan are relevant to the Proposal:*

- inventory the existing open space, trail, and greenbelt network and identify strategic lands for future expansion; create a Greenways Map;
- pursue protection of strategic greenway properties, including but not limited to: Riparian lands and river access points along the South Fork and Middle Fork of the Snoqualmie River, and Critical areas (frequently flooded lands, natural drainage courses, wetlands, riparian lands, and hillsides);
- establish park, recreation and open space standards for residential, commercial and industrial lands, and adopt them in land use codes; require that new industrial developments (among others) provide a minimum percentage of net site area for appropriate open space [Note: no minimum site open space percentage was adopted by the City as of May 1999];

- modify the zoning ordinance to protect view corridors and minimize visibility of hillside and ridge top development and forest harvesting activities;
- develop a Trail/Pathway Plan that develops and improves components of an integrated trail network for the City [Note: no Trails Plan was adopted as of May 1999]; and
- develop master site plans for City properties, including but not limited to, plans for improvement of the following:
 - Meadowbrook Farm property,
 - North Bend Community Park,
 - Landscaping of existing parks, and
 - Parks/properties identified by citizens and interest groups.

Discussion: The project sites are not identified for future annexation or acquisition by the City of North Bend. The sites could be classified as strategic greenway properties (as described in the Plan: riparian lands along the Middle Fork and South Fork and hillsides), but protection is not legally required. Although no minimum open space retention area for industrial properties has been adopted by the City, the proponent plans to maintain 44% of the Lower Site and 60% of the Upper Site in an undisturbed condition. The project would not be expected to alter views from City parks, but noise and traffic related to mining activity could affect existing and planned facilities (see the *Noise* and *Transportation* sections for details). The proposal would not conflict with City zoning or park master plans.

3.8.8 National Scenic Byways Program (1998)

Summary: *The National Scenic Byways Program is authorized by the Transportation Equity Act for the 21st Century (TEA-21) (23 U.S.C. 101, 1998). The Program provides for the designation of roads that have outstanding scenic, historic, cultural, natural, recreational and archeological qualities as All-American Roads or National Scenic Byways. These designations provide a compass for people to explore America's treasured open roads. Jurisdictions along designated roads are given priority for discretionary highway projects, planning and design grants. The Program does not place restrictions on land use within scenic corridors. Local communities, and state and federal land managing agencies submit nominations for National Scenic Byways status. In Washington State, the Department of Transportation administers the highway selection process. The Federal Highway Administration approves selections and related grants. In 1998, Interstate 90 (from Seattle to Thorp) was designated as a National Scenic Byway. This section of I-90 was the first interstate in the nation to receive National Scenic Byway designation by the Federal Highway Administration.*

Discussion: Although the National Scenic Byways Program does not place restrictions on land uses within designated corridors, the proposal has been designed to preserve the visual character of the designated section of I-90. Consistent with the Memorandum of Understanding between the Weyerhaeuser, Mountains to Sound Greenway Trust, King County, the Department of Natural Resources, and the Trust for Public Lands, the applicant proposes to mitigate mining activities and protect scenic values in the corridor by orienting mining activities on the north aspect of Grouse Ridge (away from I-90) and by creating graded and vegetated screening berms between the Lower Site and I-90. Refer to the *Aesthetic, Light and Glare* section

of this document for a visual analysis from I-90 and the discussion on the Memorandum of Understanding below for additional detail.

3.8.9 Memorandum of Understanding

Summary: *On April 29, 1998, an agreement a Memorandum of Understanding (MOU) was entered into by Weyerhaeuser, the Mountains to Sound Greenway Trust, King County, the State Department of Natural Resources and the Trust for Public Lands for permanent protection of the forested gateway to the Middle Fork Valley and the high mountains of the Greenway immediately east of North Bend.*

The gateway properties include two large, commercial-quality gravel deposits on land currently permitting mining (Upper and Lower Sites). Weyerhaeuser has entered into a lease agreement with Cadman, Inc. to develop the North Bend mining sites. The MOU includes commitments to protect the Middle and South Forks of the Snoqualmie River and to protect, as far as possible, the view from I-90.

When permits have been issued for the mine, the Greenway Trust will have a two-year option to purchase properties determined not to be needed for the mining operation. As mining is performed in segments, each completed segment will be reclaimed, replanted and donated to the State DNR in trust for King County. When mining has been completed, all of the mine parcels will have been donated to DNR in Trust for King County.

Discussion: The proposal has been designed to implement the applicable provisions of the MOU and is consistent with the applicable provisions. Views to the mining areas on the Upper and Lower Sites from I-90 are minimized consistent with the provisions of this MOU and the National Scenic Byways Program. No significant water quality impacts to the Snoqualmie River are anticipated. Please refer to the Water, Plants & Animals, and Aesthetics chapters of this Final EIS for discussions on water quality and view conditions under the proposal. .

4.0 ENVIRONMENTAL IMPACTS

4.1 CONSTRUCTION IMPACTS

4.1.1 Alternative 1 – No Action

Under the No Action Alternative, no construction activity related to the Proposal would occur on the sites. A potential land use would be harvesting of trees on the site. Compared to the Proposal, land-use impacts from harvesting would be similar to those anticipated from clearing of land prior to commencement of mining activity. Because clearing for mining activity under Alternatives 2 and 3 would be limited to approximately 35 percent of the Lower Site and approximately 40 percent of the Upper Site, the amount of site area utilized for tree harvesting under Alternative 1 would likely be greater than the area proposed to be cleared for mining.

4.1.2 Alternative 2 – Proposal: Lower and Upper Sites Mining-Exit 34

Phased clearing and construction processing facilities on both the Lower and Upper Sites would increase levels of noise, dust, and truck traffic, which would impact adjacent land uses. The phased clearing of

vegetation and establishment of processing facilities on the sites would result in an intensity level similar to those of historic forest practices. Construction activities would be short-term and would not be anticipated to result in significant land-use impacts.

4.1.3 Alternative 3 – Lower and Upper Sites Mining-(Exits 34 and 38)

Under this alternative, land-use conditions during clearing of the sites would be the same as under the Proposal. The noise, dust, and traffic associated with construction of the aggregate processing facility would be transferred from the Lower Site to the Upper Site. Construction activities would be short-term and would not be anticipated to result in significant land-use impacts. Overall, construction conditions would be similar to those discussed for the Proposal.

4.1.4 Alternative 4 – Upper Site Mining-Exit 38

Under this alternative, no construction impacts related to the Proposal would occur on the Lower Site. Construction impacts on the Upper Site would be similar to those discussed for the Proposal. Overall, construction impacts would be less than under the Proposal.

4.2 OPERATION IMPACTS

4.2.1 Alternative 1 – No Action

Under the No Action Alternative, no sand and gravel mining for commercial sales or processing activities would occur on the sites. Existing site conditions, including the deposition of fill material on the Lower Site, would continue. Harvesting of trees on both the Lower and Upper Sites may continue. Harvesting of trees on the sites would generate a level of activity (i.e., level of noise, dust, traffic) less than that under proposed sand and gravel mining. Forest practice activity on the sites would occur over a shorter period of time than proposed mining. If the Weyerhaeuser Co. were to offer for sale either of the sites, the Mountains to Sound Greenway Trust would have a 90-day option period to notify the Weyerhaeuser Co. if it intends to purchase at the appraised price. Site lands acquired by the Mountains to Sound Greenway Trust would be conveyed to a public agency for management.

4.2.2 Alternative 2 – Proposal: Lower and Upper Sites Mining-Exit 34

4.2.2.1 Land Use

The primary land-use impacts from proposed mining and processing relate to **displacement** of existing uses, **relationship** of the type and intensity (i.e., levels of traffic and noise) of proposed uses to surrounding uses, and **indirect** land-use impacts associated with potential peripheral development resulting from changes or intensification in land use at the sites.

Displacement - Approval of the Proposal would result in the conversion, in phases, of approximately 260 acres of existing forest production land at the 578-acre Upper Site and approximately 40 acres of bare ground and forest production land at the 115-acre Lower Site to sand and gravel mining for an approximately 25-year period. No more than 50 acres would be in active mining at any one time. Approximately 260 acres of existing forest on the Upper Site would be cleared, in phases. Existing forestry

uses of the Upper Site would be foreclosed during mining of each phase. As mining within each phase is completed, mined areas would be revegetated with Douglas-fir trees for future forestry use, consistent with the zoning and Comprehensive Plan designations of the Upper Site. The time to complete each mining phase would be based on market conditions, although it is anticipated that mining in each phase would be completed in approximately 5 years. No permitted uses on the Upper Site would be permanently foreclosed.

Implementation of the Proposal on the 115-acre Lower Site would result in the conversion of approximately 40 acres of forest production and bare ground for sand and gravel mining, and the potential establishment of concrete and asphalt plant facilities for an approximately 25-year period. Consistent with the Memorandum of Understanding (MOU), as mining is performed, each completed segment would be reclaimed, replanted and donated to the State DNR in trust for King County. However, because the proposed concrete and asphalt plants are proposed to provide processing throughout the life of the mining operation, reclamation of the Lower Site would not be anticipated to be completed until approximately 20 to 25 years after the clearing of existing vegetation. No permitted uses on the Lower Site would be permanently foreclosed by mining and reclamation activities; however, under the stipulations of the MOU, future uses of the sites would be limited to forestry or open space.

According to the Forest zone provisions of the King County Zoning Code, permitted uses on the sites include forestry and mining. Because processing is only allowed as an accessory use to active mineral extraction, upon completion of mining operations processing would not be permitted on the sites.

Relationship to Surrounding Uses – The relationship of the proposed uses with surrounding land uses is primarily a function of the intensity of the proposed uses (i.e., level of noise, dust, traffic), intensity of the surrounding uses, proximity of proposed uses to surrounding uses, and existence of buffers or barriers between proposed and surrounding uses.

Phased clearing and long-term mining and processing operations on the sites (including sand and gravel mining on both the Lower and Upper Sites, and eventual asphalt and concrete processing on the Lower Site) would result in increased levels of noise, dust, and truck traffic. The intensity level on the sites during mining and processing would be similar in character to the intensity level of I-90 and somewhat greater than that of the commercial area along 468th Avenue SE. The intensity level on the sites during mining and processing would be substantially greater than the existing intensity levels of the residential and recreational uses in the area.

Clearing of vegetation on the sites would result in an intensity level similar to those of historic forest practices. Mining and processing would result in a higher level of intensity, and for a longer period of time, than would forest practices.

If permits are issued for the mine, the Greenway Trust will have a two-year option to purchase properties determined not to be needed for the mining operation. As mining is performed in segments, each completed segment would be reclaimed, replanted and donated to the State DNR in trust for King County. When mining has been completed, all of the mine parcels would have been donated to DNR in Trust for King County.

LOWER SITE

Proposed mining and processing activity on the Lower Site (consisting of approximately 40 acres of the 115-acre site) would be located approximately 1,300 feet (0.25 mile) from the Lu residence, single-family residences on 476th Ave. SE and 475th Ave. SE, and the single-family residence north of SE 144th St. The mining/processing area final floor elevation of 640 feet would be approximately 120 feet lower than the Lu residence and the single-family residences, with some views to the mining/processing area on the Lower Site afforded from these areas. The proposed mining and processing activity at the Lower Site would result in a level of intensity significantly greater than the Lu residence and single-family residential uses to the north. The proposed berm along the northern edge of the proposed mining and processing area would minimize visual and noise impacts on the area to the north. However, the intensity level of the mining/processing activities, as perceived by the uses in the area to the north, would be greater than the existing single-family residence uses.

The proposed mining and processing activity on the Lower Site would be a minimum of approximately 1,300 feet (0.25 mile) from the auto/truck commercial uses (motel, gas stations and auto repair businesses) on 468th Ave. SE to the west and north. Although there would not be a significant amount of elevation difference of buffering between the proposed mining/processing area and the commercial uses to the west, the intensity level of the proposed mining and processing uses would be similar to that of the auto/truck commercial uses.

With the intervening residential and commercial uses, and the approximately 2,000 feet of separation, it is not anticipated that the future school use would be directly impacted by proposed mining activities. The potential for land use impacts to the future school use from proposed mining on the Lower Site is primarily a function of noise, air quality and traffic congestion and safety. The traffic analysis prepared for the EIS indicates that the additional truck traffic from mining and processing on the Lower Site would conflict with school traffic in the vicinity of 468th Avenue SE/SE North Bend Way/I-90 ramps, but truck traffic impacts at the school site are not anticipated. The noise and air quality analyses did not identify any significant noise or air quality impacts at the school site from mining activities. No significant land use impacts to the school site are anticipated.

The residential subdivision accessed from SE 153rd St., south of I-90, is also approximately 0.25 mile from the proposed mining/processing area on the Lower Site. The final floor elevation of the mining/processing area would be similar to that of the subdivision to the south. Because the section of I-90 between the Lower Site and the subdivision is approximately 60 to 80 feet higher than the Lower Site and the subdivision, and because I-90 has a relatively high level of intensity, I-90 provides a separation between the Lower Site and the subdivision to the south. Considering the separation provided by I-90, the proposed mining/processing use on the Lower Site would not be anticipated to significantly impact these residential uses.

The WoodRiver subdivision is approximately 5,000 feet (1.0 mile) from the proposed mining/processing area on the Lower Site. The proposed intensity level of the mining and processing activity would be significantly greater than the intensity level of the WoodRiver subdivision. However, the proposed approximately 100-foot-high western pit wall, the location of commercial uses between the Lower Site and WoodRiver, and the approximate 1 mile separation, would buffer WoodRiver from the proposed mining/processing activity and the Proposal would not significantly impact residential uses at WoodRiver.

UPPER SITE

The proposed mining area on the Upper Site (consisting of 260 acres of the 578-acre site) would be approximately 5,000 feet (1.0 mile) from the single-family residential homes along SE Lake Dorothy Rd. The top of the ridge surrounding the mining area on the Upper Site would be approximately 900 feet higher than the residential uses along SE Lake Dorothy Rd, and direct views to the mining activity would not be anticipated to be available. The proposed mining at the Upper Site would result in a level of intensity significantly greater than the intensity level of residential uses along SE Lake Dorothy Rd. However, because of the distance and elevation difference between the proposed mining area on the Upper Site and residences along SE Lake Dorothy Rd., and the proposed retention of a vegetated berm around the edge of the mining area, the proposed use would not be considered inconsistent with the residential use.

The Washington State Fire Training Academy and the Homestead Valley Mine are both approximately 1,000 feet from the proposed mining activity at the Upper Site. Because the intensity level of the proposed mining would be generally similar to that of the Washington State Fire Training Academy and the Homestead Valley Mine, proposed mining at the Upper Site would be considered generally consistent with these uses.

Proposed mining activities on the Upper Site would be located approximately 2,000 feet from residences to the south along SE 172nd Street. Because of topographic separation between the Upper Site and these residences and the limited amount of mining-related truck traffic on SE Homestead Valley Road, significant land use impacts to residential uses on SE 172nd Street would not be anticipated.

Indirect - Mining of the site's sand and gravel resources is not expected to generate significant indirect land use impacts. Uses of the type and scale proposed do not typically generate spin-off uses; mining would not be expected, for example, to create a significant demand for commercial or residential uses to support and service planned operations or to house employees. Similarly, mining is not expected to generate cumulative adverse land-use impacts. It would not, for example, be expected to change the general character of the area. Mining is a resource land use that is compatible with historical forest production activities.

4.2.2.2 Land Use Designations

The King County Zoning Code (21A.08.090(B)(9)), allows mining operations as a permitted use in the F zone if mining activities are more than 0.25 mile (one-quarter mile) from an established residence and do not use local access streets that abut lots developed for residential use. Otherwise, a Conditional Use Permit is required. Asphalt/concrete mixtures and block activities are permitted only if they are accessory to a primary mineral extraction use or are a continuation of an existing mineral processing use.

King County has determined that the residential accessory structure on the Lu property is an established residence for the purposes of KCC 21A.080.090(B), and is within one-quarter mile of mining activities on the Lower Site. The proposed asphalt and concrete processing facilities would process material mined on the Lower and Upper Sites, and would be considered accessory to a primary mineral extraction use. Refer to the *Relationship to Plans and Policies* section of this document for additional detail

The existing Forestry (F) and Rural Area (RA) zoning designations in the vicinity of the sites would restrict future residential densities and thereby limit potential future conflicts between proposed mining activities and a greater number of residences.

4.2.3 Alternative 2A – Upper Site Mining and Limited Lower Site Mining-Exit 34

Under the Lower Site Option, overall land-use impacts related to the relationship to surrounding land uses and indirect spin-off impacts would be similar to those discussed for Alternative 2. Compared to Alternative 2, the Lower Site Option would result in less displacement of forest production land.

4.2.4 Alternative 3 – Lower and Upper Sites Mining (Exits 34 38)

Under this alternative, land-use conditions during early phases of the mining operation (i.e., prior to establishment of the processing facilities) would be identical to those under the Proposal. Upon completion of mining at the Lower Site, aggregate processing facilities would be located at the Upper Site and, as under the Proposal, asphalt and concrete processing facilities would be established at the Lower Site. Relocation of the aggregate processing facility to the Upper Site would transfer a portion of the dust, noise and traffic-generating features of the Proposal to the Upper Site. However, with the asphalt and concrete processing facilities located at the Lower Site, land use compatibility impacts from mining/processing activity at the Lower Site would be similar to those under the Proposal, particularly in relation to the Lu residence and single-family residential uses immediately north of the Lower Site.

As under Alternative 2, mining activities on the Lower Site would be within one-quarter mile of the Lu residence.

Aggregate processing facilities under Alternative 3 would be located on the Upper Site, as compared to the Lower Site under the Proposal. Relocation of the aggregate processing facility would transfer a generator of dust, noise and truck traffic to the Upper Site, further from residential uses in the vicinity of the Lower Site. . It is likely that a Shoreline Substantial Use Permit would be required for required improvements to the bridge crossing the Snoqualmie River.

Land use impacts to Olallie State Park and homes in the vicinity of SE Homestead Valley Road and SE 172nd Street would primarily be a function of increased noise (including noise from truck traffic), air quality, and pedestrian and vehicular safety. The noise analysis conducted for the EIS indicated that truck traffic associated with Alternative 3 would generate a “serious” noise impact in the vicinity of Exit 38. The traffic analysis indicated that the increased truck traffic associated with Alternative 3 would conflict with existing vehicular, bicycle and pedestrian traffic along SE Homestead Valley Road and Olallie State Park. The air quality analysis did not identify any significant air quality impacts associated with mining or truck traffic. Although no direct land use impacts to Olallie State park or homes in the vicinity of 172nd Street would occur, land use impacts related to increased truck traffic and noise levels would be greater than under Alternative 2 and somewhat less than under Alternative 4.

The process for offering lands for purchase by the Mountains to Sound Greenway Trust and donation to King County would be identical to that described for Alternative 2.

4.2.5 Alternative 3A – Upper Site Mining and Limited Lower Site Mining-Exit 34

Under the Lower Site Option, overall land-use impacts related to the relationship to surrounding land uses and indirect spin-off impacts would be similar to those discussed for Alternative 3. Compared to Alternative 3, the Lower Site Option would result in less displacement of forest production land.

4.2.6 Alternative 4 – Upper Site Mining-Exit 38

Under this alternative, no mining or processing activities would occur on the Lower Site and the Lower Site would remain in its existing forestry use. Land use impacts from noise, air quality and visual changes related to mining and processing on the Lower Site would not occur. In the future, forest harvesting would occur on the site, which would generate increased levels of dust, noise, and truck traffic. However, forest-production activities on the Lower Site would occur over a significantly shorter period than mining/processing under the Proposal, and overall land-use impacts would be less.

Mining conditions at the Upper Site, and resultant potential for direct land-use impacts, would be generally similar to those discussed for the Proposal. However, truck traffic on Homestead Valley Road would increase compared to Alternatives 2 and 3. It is likely that a Shoreline Substantial Use Permit would be required for required improvements to the bridge crossing the Snoqualmie River.

As under Alternative 3, land use impacts to Olallie State Park and homes in the vicinity of SE Homestead Valley Road and SE 172nd Street would primarily be a function of increased noise (including noise from truck traffic), air quality, and pedestrian and vehicular safety. The noise analysis conducted for the EIS indicated that truck traffic associated with Alternative 4 would generate a “serious” noise impact in the vicinity of Exit 38. The traffic analysis indicated that the increased truck traffic associated with Alternative 4 would conflict with existing vehicular, bicycle and pedestrian traffic along SE Homestead Valley Road and Olallie State Park. The air quality analysis did not identify any significant air quality impacts associated with mining or truck traffic. Although no direct land use impacts to Olallie State park or homes in the vicinity of 172nd Street would occur, land use impacts related to increased truck traffic and noise levels would be greater than under Alternatives 2 and 3.

Because no mining would occur on the Lower Site, there would be no obligation to donate the parcel to the DNR in trust for King County. The process for offering Upper Site lands for purchase by the Mountains to Sound Greenway Trust and donation to King County would be identical to that discussed for Alternative 2.

5.0 CUMULATIVE IMPACTS

The Homestead Valley Mine immediately south of the Upper Site, the King County Public Works gravel storage yard on SE Middle Fork Road, and the Old Stone Quarry on North Bend Way are the only active mining operations in the immediate vicinity. The Snoqualmie Sand and Gravel Mine is also located in the general vicinity, approximately 5 miles to the northwest. Because the location of mining operations is largely based on the suitability of a site's resources and land use designations, in conjunction with other mining operations in the site, the addition of the proposed mining operation would not be anticipated to increase pressure for additional mining operations in the area.

6.0 MITIGATION MEASURES

6.1 ALTERNATIVES 2, 3, AND 4

The following mitigation measures are proposed for Alternatives 2, 3, and 4:

The proposed mining would be phased. Upon completion of mining within an individual phase, the mined area would be reclaimed, thus limiting the amount of exposed mining area during any given time. Each reclaimed mine phase area would be offered for donation to King County, assuring a return of that mine phase to long-term commercial forestry.

A naturally vegetated buffer would be retained around the perimeter of the Lower and Upper Sites to buffer nearby residential uses from the proposed mining and processing activities.

Gates on access roads would remain closed when mining and processing activities are not taking place.

The ultimate reclamation of the sites, following the conclusion of mining activities, includes the following:

- Pre-mining site preparation, including use of onsite overburden material
- Slope stabilization and erosion control, including stormwater control and temporary erosion-control measures such as hydroseeding and filter fence check dams
- Final contouring and topsoil placement
- Revegetation with trees.

All outdoor and security lights would be shielded with top-clad plates and would be focused downward to avoid glare onto surrounding areas.

Dust and noise levels from proposed mining and processing activities would be minimized (refer to the *Noise and Air Quality* sections for details).

7.0 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

The forest lands character of portions of the Lower and Upper Sites would temporarily change under Alternatives 2 and 3, and a portion of the Upper Site would temporarily change under Alternative 4. The proposed mining and processing activity at the Lower Site under Alternatives 2 and 3 would result in a significant unavoidable adverse land use impact because of the temporary conversion (up to 25-years) of forest use.

8.0 REFERENCES

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